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UNITED NATIONS COMMISSION
ON INTERNATIONAL TRADE LAW
Working Group on Electronic Commerce
Thirty-third session
New York, 29 June - 10 July 1998

PROPOSAL BY THE UNITED STATES OF AMERICA

Note by the Secretariat

1. At the close of the thirty-second session of the Working Group, the proposal was made that the Working Group might wish to give preliminary consideration to undertaking the preparation of an international convention based on provisions of the Model Law and of the Uniform Rules. It was agreed that the topic might need to be taken up as an agenda item at the next session of the Working Group on the basis of more detailed proposals possibly to be made by interested delegations. However, the preliminary conclusion of the Working Group was that the preparation of a convention should in any event be regarded as a project separate from both the preparation of the Uniform Rules and any other possible addition to the Model Law. Pending a final decision as to the form of the Uniform Rules, the suggestion to prepare a convention at a later stage should not distract the Working Group from its current task, which was to focus on the preparation of draft uniform rules on digital and other electronic signatures, and from its current working assumption that the Uniform Rules would be in the form of draft legislative provisions. It was generally understood that the possible preparation of a draft convention should not be used as a means of reopening the issues settled in the Model Law, which might negatively affect the increased use of that already successful instrument (A/CN.9/446, para. 212).

2. Following the thirty-second session of the Working Group, the Secretariat received from the delegation of the United States of America a proposal for a draft international convention on electronic transactions, together with the text of a "United States Government Non-paper on Electronic Transactions" that explains the rationale and purpose of the proposed convention. The text of that proposal and the corresponding "non-paper" are reproduced in the annex to this note as they were received by the Secretariat.

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ANNEX

DRAFT INTERNATIONAL CONVENTION ON ELECTRONIC TRANSACTIONS

CHAPTER I

Proposed Goal of Chapter I: To set forth any necessary definitions. To be developed after Chapter II and III.

CHAPTER II

Proposed Goal of Chapter II: In order to implement the legal rules articulated in the second section, as set forth below, it may be necessary for states to review their existing and proposed legislation to assure that it is appropriately tailored to electronic transactions. In order to facilitate such review and adoption on a harmonized basis, the following general obligations are proposed as the framework states should use to support electronic transactions on a global basis.

POSSIBLE LANGUAGE:

II. General Obligations

To encourage the free flow of electronic transactions and to avoid the creation of barriers to these transactions, subject to overriding public policy, the Contracting States hereby agree as follows:

> **Modification of Existing Rules and Minimal Adoption of New Rules** - States shall make only those changes to their laws that are necessary to support the use of electronic transactions. Existing rules should be modified and new rules adopted only in co-operation with the private sector and where necessary.

Contracting States recognize that parties to a transaction may determine the method of authentication for that transaction. Recognizing that parties may make this determination and recognizing that this determination should have the legal effect intended by the parties, the Contracting States agree as follows:

> **Party Autonomy** - Parties to a transaction should be permitted, to the maximum extent possible, to determine by contract the appropriate technological and business methods of authentication with the assurance that those means will be recognized as legally binding, whether or not those technological and business means are specifically addressed by legislation or regulation. The terms of any agreement (including closed systems) between parties governing their transaction should be enforced without regard to any statutory framework governing electronic authentication.

Further, Contracting States recognize that cryptography is not the sole means of proving the source or existence of a message. Recognizing that parties may establish the source or existence of a message in different ways, Contracting States agree as follows:

All Authentication Technologies and Business Methods May Be Evidence of Authenticity - Where the law requires evidence of the authenticity or integrity of a message, a party shall be permitted to use any authentication technology or business method, whether or not such authentication technology or business method has been specifically addressed by legislation or regulation.

Electronic Authentication methods should not be "locked in" through legislative fiat but rather should allow for changing applications for existing and future technologies. Therefore, the Contracting States agree that:

Technology Neutrality - Any rules should neither require nor hinder the use or development of authentication technologies. States should anticipate that authentication methods will change over time and avoid legislation that might preclude innovation or new applications. States should avoid laws that intentionally or unintentionally drive the private sector to adopt only one particular technology for electronic authentication to the exclusion of other viable authentication methods.

Authentication technologies may be implemented and used by businesses in ways that were not originally envisaged when legislation was passed. Recognizing that technology may be used for purposes such as establishing age or authority, which may go beyond verifying identity and achieving non-repudiation, and recognizing that business models for authentication may not use third parties, the Contracting States agree that:

Implementation Neutrality - Any rules should neither require nor hinder the use or development of new or innovative business applications or implementation models.

To remove barriers to the free flow of electronic transactions and to avoid the creation of new barriers, subject to overriding public policy, the Contracting States agree that:

Non-Discrimination - States shall accord to providers and users of authentication technologies and business methods of another state treatment no less favourable than it accords in like circumstances to its own providers and users of authentication technologies and business methods.

Avoid Unnecessary Barriers to Trade - States should enhance the flow of cross-border electronic transactions and not create unnecessary barriers to trade.

CHAPTER III

Proposed Goal of Chapter III: To recognize the acceptability of electronic signatures for legal and commercial purposes, define the characteristics of a valid electronic writing and an original document, support the admission of electronic evidence and the electronic retention of records. These provisions would be drawn from the enabling provisions of the UNCITRAL Model Law on Electronic Commerce.

POSSIBLE LANGUAGE:

III. Specific Obligations

Contracting States recognize the work of the United Nations Commission on International Trade Law and the importance of establishing its governing provisions on a uniform, international basis. Contracting States also recognize information is increasingly generated, stored, sent, received or otherwise processed electronically, rather than in a paper based form. Recognizing these important business practices, the Contracting States hereby agree on the following:

Legal Recognition of Data Messages

Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message. [Source Model Law on Electronic Commerce, article 5].

Formation and Validity of Contracts

(1) In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose.

(2) The provisions of this article do not apply to the following ... [limited exception]. [Source: Model Law on Electronic Commerce, article 11].

Contracting States recognize that the formal requirements that currently exist under many legal regimes may constitute insurmountable barriers to the conduct of electronic transactions on an international basis. As a result, there is a paramount need for assuring that electronically transmitted messages are allowed to satisfy these formal requirements subject to overriding public policy. Therefore, the Contracting States agree as follows:

Writing

(1) Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing.

(3) The provisions of this article do not apply to the following ... [limited exception]. [Source: Model Law on Electronic Commerce, article 6].

Signature

(1) Where the law requires a signature of a person, that requirement is met in relation to a data message if:

(a) a method is used to identify that person and to indicate that person's approval of the information contained in the data message; and

(b) that method is a reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the absence of a signature.

(3) The provisions of this article do not apply to the following ... [limited exception]. [Source: Model Law on Electronic Commerce, article 7].

Original

(1) Where the law requires information to be presented or retained in its original form, that requirement is met by a data message if:

(a) there exists a reliable assurance as to the integrity of the information from the time when it was first generated in its final form, as a data message or otherwise; and

(b) where it is required that information be presented, that information is capable of being displayed to the person to whom it is to be presented.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing.

(3) For the purposes of subparagraph (a) of paragraph (1):

(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change which arises in the normal course of communication, storage and display; and

(b) the standard of reliability required shall be assessed in the light of the purpose for which the information was generated and in the light of all the relevant circumstances.

(4) The provisions of this article do not apply to the following ... [limited exception]. [Source: Model Law on Electronic Commerce, article 8].

The Contracting States recognize that the inability of parties to prove the existence of electronic transactions in the event of dispute and formal judicial proceedings may itself be an inhibition to the conduct of electronic transactions. To assure the legal equivalence of electronic documents with paper based ones, the Contracting States agree that:

Admissibility and Evidential Weight of Data Messages

(1) In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to deny the admissibility of a data message in evidence:

(a) on the sole ground that it is a data message; or,

(b) if it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not in its original form.

(2) Information in the form of a data message shall be given due evidential weight. In assessing the evidential weight of a data message, regard shall be had to the reliability of the manner in which the data message was generated, stored or communicated, to the reliability of the manner in which the integrity of the information was maintained, to the manner in which its originator was identified, and to any other relevant factor. [Source: Model Law on Electronic Commerce, article 9]

Contracting States further recognize that requirements for record retention, which exist both as a matter of law and business practice, may prove to be obstacles for electronic transactions. The Contracting States agree, therefore, that:

Retention of Data Messages

(1) Where the law requires that certain documents, records or information be retained, that requirement is met by retaining data messages, provided that the following conditions are satisfied:

(a) the information contained therein is accessible so as to be usable for subsequent reference; and

(b) the data message is retained in the format in which it was generated, sent or received, or in a format which can be demonstrated to represent accurately the information generated, sent or received; and

(c) such information, if any, is retained as enables the identification of the origin and destination of a data message and the date and time when it was sent or received.

(2) An obligation to retain documents, records or information in accordance with paragraph (1) does not extend to any information the sole purpose of which is to enable the message to be sent or received.

(3) A person may satisfy these requirement referred to in paragraph (1) by using the services of any other person, provided that the conditions in subparagraphs (a), (b) and (c) of paragraph 1 are met. [Source: Model Law on Electronic Commerce Article 10]

United States Government
Non-Paper on Electronic Transactions

To encourage electronic transactions, the United States supports both a domestic and global uniform legal framework that recognizes, facilitates, and enforces electronic transactions worldwide.

I.

The United Nations Commission on International Trade Law (UNCITRAL) has completed work on a Model Law on Electronic Commerce that supports the commercial use of international contracts in electronic commerce. The Model Law establishes rules and norms that define the characteristics of a valid electronic writing and an original document, provides for the acceptability of electronic signatures for legal and commercial purposes, and supports the admission of computer evidence. It also validates and recognizes contracts formed through electronic means, setting default rules for contract formation and the governance of electronic contract performance.

While many countries, including the United States, are using the Model Law as a basis for updating their commercial laws, many countries are not. The United States Government supports the adoption of the enabling principles that are contained in the Model Law through a binding international agreement as a start to defining an international set of uniform commercial principles for electronic commerce.

II.

On the international level, a number of countries are considering or have enacted digital signature legislation to specifically address authentication methods including digital signatures. Recently, UNCITRAL began work in the authentication area, specifically including digital signatures, and is currently considering model statutory provisions.

Since UNCITRAL began its work last year, new models for the implementation and use of digital signature technology have emerged. The expanding array of authentication methods and the complexity of their commercial use raise concerns about fashioning detailed legal rules at this point in such areas as, for example, certificate authorities and liability. In the United States, most states to consider digital signature legislation recently have rejected statutory enactments setting forth specific rules for digital signatures, opting instead for more generalized enabling and supporting legislation that supports the use of digital signatures and other authentication technologies, but which otherwise does not impose liability or licensing schemes.

This new legislative approach reflects important evolutionary market changes. In particular, the market appears unlikely to settle on one universal authentication mechanism or model of implementation in the near future. Parties appear headed toward a choice between different types

of authentication regimes, depending on the nature of the transaction and upon the prior relationship, if any, among the parties to the transaction. For example, a large company may choose one authentication method for the electronic system used to procure goods from supplie but a different method for on-line purchases by its customers.

Like other aspects of electronic commerce, authentication methods and technologies are developing rapidly. In the area of digital signatures, the technology is being implemented in ways that are different from the public key infrastructures envisaged when the first digital signature legislation was passed. For example, digital signatures may be used for purposes suc as establishing age or authority, which may go beyond verifying identity and achieving nonrepudiation. In addition, much of its use is in closed rather than in open systems. There is also recognition that digital signatures are being used for a great number of business purposes apart from those originally envisaged; for example, minimal value certificates are already being issued on a wide scale basis.

The U.S. Government supports the development of structures that will support a variety of authentication methods and technologies as well as a variety of implementation models. Fashioning rules that would govern digital signature technology or any other single authentication technology, to the exclusion of other authentication approaches, would inhibit rather than encourage the growth of electronic commerce. Nevertheless, the U.S. Government recognizes the valuable dialogue supported by UNCITRAL on these issues.

The U.S. Government believes that UNCITRAL should consider giving priority attention to an International Convention on Electronic Transactions. The Convention would remove paper-based obstacles to electronic transactions, and address electronic authentication issues.

III.

UNCITRAL should work towards a binding Convention on electronic transactions that would have two elements:

Part A: General Obligations -- These would include: minimal modification to existing legal rules and minimal adoption of new rules; technology and implementation neutrality; a non-discriminatory approach toward authentication technologies and business applications from oth countries; the avoidance of unnecessary barriers to trade. In addition:

> Party Autonomy-- Parties to a transaction should be permitted, to the maximum extent possible, to determine by contract the appropriate technological and business methods of authentication with the assurance that those means will be recognized as legally binding, whether or not those technological and business means are specifically addressed by legislation or regulation. The terms of any agreement (including closed systems) between parties governing their transaction should be enforced without regard to any statutory framework governing electronic authentication.
>
> All Authentication Technologies and Business Methods May Be Evidence of Authenticity Where the law requires evidence of the authenticity or integrity of a message, a party shall be permitted to use any authentication technology or business method to try to prove authenticity, whether or not such authentication technology or business method has been

specifically addressed by legislation or regulation. (As with the authentication of physical documents, a party denying the agreement could introduce evidence disputing its authenticity or integrity and the issue would be resolved by the trier of fact.)

Part B: Adoption of Key Elements of the Model Law on Electronic Commerce -- Enabling provisions drawn from the provisions of the UNCITRAL Model Law on Electronic Commerce would define an international set of uniform commercial principles for electronic commerce. The Convention would recognize the acceptability of electronic signatures for legal and commercial purposes, define the characteristics of a valid electronic writing and an original document and support the admission of electronic evidence and the retention of electronic records.